

Serial No.: 10/704,499

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-38 (Canceled)

39. (New) A method comprising:

adding a quantity of at least one metal aminotetrazole hydroxide to a gas generant formulation, whereby after the addition the gas generant formulation has an increased burn rate as compared to the gas generant formulation prior to the addition.

40. (New) The method of claim 39 wherein after the addition,

the at least one metal aminotetrazole hydroxide is present in the gas generant formulation in a relative amount of at least about 1 wt.%.

41. (New) The method of claim 39 wherein after the addition,

the at least one metal aminotetrazole hydroxide is present in the gas generant formulation in a relative amount of at least about 5 wt.%.

Serial No.: 10/704,499

42. (New) The method of claim 39 wherein after the addition, the at least one metal aminotetrazole hydroxide is present in the gas generant formulation in a relative amount of at least about 10 wt.%.

43. (New) The method of claim 42 wherein after the addition, the at least one metal aminotetrazole hydroxide is present in the gas generant formulation in a relative amount of no more than about 25 wt.%.

44. (New) The method of claim 39 wherein the added metal aminotetrazole hydroxide is selected from the group consisting of copper aminotetrazole hydroxide, zinc aminotetrazole hydroxide and combinations thereof.

45. (New) The method of claim 39 wherein the added metal aminotetrazole hydroxide is copper aminotetrazole hydroxide.

46. (New) The method of claim 45 wherein after the addition, the copper aminotetrazole hydroxide is present in the gas generant formulation in a relative amount of at least about 1 wt.%.

Serial No.: 10/704,499

47. (New) The method of claim 45 wherein after the addition, the copper aminotetrazole hydroxide is present in the gas generant formulation in a relative amount of at least about 5 wt.%.

48. (New) The method of claim 45 wherein after the addition, the copper aminotetrazole hydroxide is present in the gas generant formulation in a relative amount of at least about 10 wt.%.

49. (New) The method of claim 45 wherein after the addition, the copper aminotetrazole hydroxide is present in the gas generant formulation in a relative amount of at least about 10 wt.% and no more than about 25 wt.%.

50. (New) The method of claim 45 wherein the copper aminotetrazole hydroxide has an empirical formula of $\text{Cu}(\text{CH}_2\text{N}_5)\text{OH}$.

51. (New) The method of claim 45 wherein the copper aminotetrazole hydroxide is formed by reacting $\text{Cu}(\text{OH})_2$ with 5-aminotetrazole.

Serial No.: 10/704,499

52. (New) The method of claim 39 wherein the gas generant formulation contains copper bis-guanyl urea dinitrate as a primary fuel.

53. (New) The method of claim 52 wherein the gas generant formulation contains ammonium nitrate as a primary oxidizer.

54. (New) The method of claim of claim 39 wherein the gas generant formulation contains guanidine nitrate as a primary fuel.

55. (New) The method of claim of claim 54 wherein the gas generant formulation contains basic copper nitrate as a primary oxidizer.

56. (New) The method of claim of claim 39 wherein the gas generant formulation contains a primary oxidizer selected from the group consisting of ammonium nitrate, basic copper nitrate, copper diammine dinitrate and mixtures of ammonium nitrate and copper diammine dinitrate.

Serial No.: 10/704,499

57. (New) The method of claim 39 comprising:

wherein the at least one metal aminotetrazole hydroxide is added to a gas generant formulation comprising:

a primary fuel component selected from the group consisting of copper bis-guanyl urea dinitrate, guanidine nitrate and mixtures thereof; and

a primary oxidizer component selected from the group consisting of ammonium nitrate, basic copper nitrate, copper diammine dinitrate and mixtures of ammonium nitrate and copper diammine dinitrate.

58. (New) The method of claim 57 wherein the added at least one metal aminotetrazole hydroxide is copper aminotetrazole hydroxide.

59. (New) The method of claim 58 wherein the primary fuel is guanidine nitrate and the primary oxidizer is basic copper nitrate.

60. (New) The method of claim 58 wherein the primary fuel is copper bis-guanyl urea dinitrate and the primary oxidizer is ammonium nitrate.

Serial No.: 10/704,499

61. (New) The method of claim 57 wherein the added at least one metal aminotetrazole hydroxide is present in the gas generant formulation in a relative amount of at least about 5 wt.%.

62. (New) A method comprising:
adding a quantity of at least about 1 composition weight percent of copper aminotetrazole hydroxide having an empirical formula of $\text{Cu}(\text{CH}_2\text{N}_5)\text{OH}$ to a gas generant formulation, whereby after the addition the gas generant formulation has an increased burn rate as compared to the gas generant formulation prior to the addition.

63. (New) The method of claim 62 wherein the copper aminotetrazole hydroxide is added in a quantity of at least about 5 composition weight percent.

64. (New) The method of claim 62 wherein the copper aminotetrazole hydroxide is added in a quantity of at least about 10 composition weight percent.

Serial No.: 10/704,499

65. (New) The method of claim 64 wherein the copper aminotetrazole hydroxide is added in a quantity of no more than about 25 composition weight percent.

66. (New) The method of claim 62 wherein the copper aminotetrazole hydroxide is formed by reacting $\text{Cu}(\text{OH})_2$ with 5-aminotetrazole.

67. (New) The method of claim of claim 62 wherein the gas generant formulation contains copper bis-guanyl urea dinitrate as a primary fuel.

68. (New) The method of claim of claim 67 wherein the gas generant formulation contains ammonium nitrate as a primary oxidizer.

69. (New) The method of claim of claim 62 wherein the gas generant formulation contains guanidine nitrate as a primary fuel.

70. (New) The method of claim of claim 69 wherein the gas generant formulation contains basic copper nitrate as a primary oxidizer.

Serial No.: 10/704,499

71. (New) The method of claim of claim 62 wherein the gas generant formulation contains a primary oxidizer selected from the group consisting of ammonium nitrate, basic copper nitrate, copper diammine dinitrate and mixtures of ammonium nitrate and copper diammine dinitrate.